

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number
WO 2005/062828 A2

(51) International Patent Classification: Not classified

(74) Agents: RHOADS, Donald, L. et al.; Kramer Levin Naftalis & Frankel LLP, 919 Third Avenue, New York, NY 10022 (US).

(21) International Application Number:
PCT/US2004/042710

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date:
20 December 2004 (20.12.2004)

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/532,842 23 December 2003 (23.12.2003) US

(71) Applicant (for all designated States except US): BRACCO IMAGING S.P.A. [—/IT]; Via Egidio Folli 50, I-20134 Milan (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): TWEEDLE, Michael [US/US]; 72 Library Place, Princeton, NJ 08540 (US). FAN, Hong [US/US]; 3 Barley Court, Plainsboro, NJ 08536 (US). LATTUADA, Luciano [IT/IT]; Via Pablo Neruda, 4/C, I-20060 Bussero (MI) (IT). RAMA-LINGHAM, Kondareddiar [US/US]; 46 Liberty Place, Dayton, NJ 08810 (US). SWENSON, Rolf, E. [US/US]; 35 Fieldston Road, Princeton, NJ 08540 (US).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/062828 A2

(54) Title: NEW COMPOUNDS USEFUL AS METAL CHELATORS

(57) **Abstract:** New compounds are provided that may be used to chelate a metal. The compound comprise polyazamacrocyclic compound with at least one phosphonic group substituted on at least one of the aza groups of the polyazamacrocyclic compound. Methods for preparing the compounds are also provided. Methods for preparing a diagnostic imaging agent using the compounds and methods for diagnostic imaging are further provided. Methods for preparing a therapeutic agent using the compounds and methods for therapy are further provided.